APPENDIX A

Performance Work Statement
Electronic Only

SECTION C - DESCRIPTIONS AND SPECIFICATIONS

PERFORMANCE WORK STATEMENT
FOR
Formerly Used Defense Sites (FUDS)
Military Munitions Response Program (MMRP)
Site Inspections (SI)
at Multiple Sites
(CONUS and OCONUS)
24 May 2005

Revison #1: 8 July 2005
Revision #2: 27 July, 2006
Revision #3: 28 September, 2006
This is a firm fixed price Task Order

Revision #2 (27 July, 2006): This revision adds Perchlorate Sampling and Analysis and MRSPP Coordination to the requirements of this Task Order.

Revision #3 (28 September, 2006): This revision clarifies requirements for the MRSPP Coordination and specifies the Period of Performance.

1.0 OBJECTIVE:

The objective of the MMRP SI is to determine whether the individual project sites within the FUDS program warrants further response action or no Department of Defense action indicated (NDAI).

2.0 BACKGROUND AND GENERAL STATEMENT OF WORK:

2.1 Regulatory Guidelines. The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program - Formerly Used Defense Sites (DERP-FUDS). Munitions and Explosives of Concern (MEC) exist on property formerly owned or leased by the Department of Army. USACE is conducting environmental response activities at FUDS in accordance with Engineer Regulation (ER) 200-3-1 and the DoD Management Guidance for the Defense Environmental Response Program (DERP). USACE is conducting these activities in accordance with CERCLA.

2.1.1 MEC is a safety hazard and may constitute an imminent and substantial endangerment to the local populace and site personnel. The work associated with this Site Investigation(s) shall

be performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104, and the National Contingency Plan (NCP), Sections 300.120(d) and 300.400(e), Executive Orders 12580 and 13016.

2.1.2 All activities involving work in areas potentially containing unexploded ordnance hazards shall be conducted in full compliance with Department of Defense (DoD), Department of Army, US Army Corps of Engineers (USACE), state, local and federal requirements regarding safety, personnel, equipment, and procedures. 29 CFR 1910.120 shall apply to all actions taken at this site.

2.1.3 The project sites are not suspected to contain Recovered Chemical Warfare Materiel (RCWM); however, if the contractor identifies or suspects CWM, the contractor shall immediately withdraw upwind from the work area and notify the USAESCH Chemical Warfare Design Center and the USAESCH Ordnance and Explosives (OE) Safety Office for assistance and guidance. The contractor shall secure the area and locate two Unexploded Ordnance (UXO) Technicians at level II or above upwind of the suspect CWM to secure the site until relieved by the Technical Escort Unit (TEU) or Explosive Ordnance Disposal (EOD) personnel.

3.0 Performance Work Statement:

The following performance work statement will apply to all tasks/projects in this PWS.

The contractor shall perform the activities necessary to meet the objective in paragraph 1.0 of this PWS for munitions and explosives of concern (MEC) and munitions constituents (MC). MEC intrusive activities shall **not** be performed during this SI. Work shall be in accordance with (IAW) with ER 200-3-1, the DoD Management Guidance for the Defense Environmental Response Program (DERP), and Engineering Pamphlet (EP) 75-1-2.

The contractor shall collect the minimum amount of information necessary to (i) eliminate from further consideration those releases that pose no significant threat to public health or the environment; (ii) determine the potential need for a time critical removal action; (iii) collect or develop additional data, as appropriate, for Hazard Ranking System (HRS) scoring by

Environmental Protection Agency (EPA); and (iv) collect data, as appropriate, to characterize the release for effective and rapid initiation of the Remedial Investigation and Feasibility Study (RI/FS). The contractor shall also collect the appropriate data to complete the Munitions Response Site Prioritization Protocol (MRSPP).

Methods to be used to achieve the specified objectives shall be determined by the Contractor.

Quality Control. The Contractor shall implement an accepted Quality Control (QC) Program. The Quality Control Program shall include QC procedures for all aspects and types of work. The Contractor shall ensure that QC documentation is maintained, and provided in the Final Reports. If any Government QA review identifies a process failure or a work product failure, the contractor will be issued a Corrective Action Request (CAR). The Contractor shall provide full documentation detailing the cause of the failure, why it was not detected in the Contractor's QC Program, and how the problem was corrected. Failure can be defined as workmanship or work products not complying with the WP or not meeting project needs defined during TPP or other accepted industry practices or defined as not complying with basic safety concepts and other industry safety practices.

Kick Off Meeting: The Contractor(s) shall plan to attend a kick off meeting, after award, in Huntsville, Alabama for 1 day.

Work Plan: The contractor shall prepare and submit a programmatic SI Work Plan (WP) which will also address any contractor-specific programmatic information supplemental to the Programmatic Sampling and Analysis Plan provided by the government. The WP shall be prepared following the general format described in data item description (DID) MR-001. Deviations from this format will be accepted if they are for the purpose of consolidating topics into a single chapter or sub-chapter or for removing duplications. For each site, a site-specific Work Plan and SAP annex shall be prepared.

Geographic Information System (GIS). The Contractor shall create a GIS in accordance with DID MR-005-07. The coordinate system for these tasks/projects shall be UTM Coordinates. All

geo-referenced data shall be submitted in UTM Coordinates.

Munitions Constituents Sampling and Analysis: MC sampling and analysis shall be performed IAW Final Programmatic SAP and applicable Site-Specific SAP. Any exceptions to the Programmatic SAP must be clearly indicated in the Site-Specific SAP. Contractor shall determine in consultation with their subcontractor laboratory appropriate analytical methodology to meet or exceed the data quality objectives provided in Table 1 of the Programmatic SAP. If these DQOs cannot be met with standard analytical methodology, provide recommendation for best value approach. Technical proposal shall provide laboratory's proposed reporting limits along with their method detection limits. It shall also describe laboratory's procedures for subsampling and sample preparation for explosives and any method variations to address analytes not addressed by routine methods, such as PETN and nitroglycerine. For aqueous samples, solid phase extraction rather than salting out extraction shall be used.

The contractor shall address MC sampling and analysis requirements and deliverables IAW with DID MR-005-10, with the following exceptions:

- The USACE validation process has been replaced. The contractor shall use a laboratory that meets the requirements of the HTRW Chemical Data Quality Management (CDQM) Policy for Environmental Laboratory Testing (USACE, 2004), to include NELAP accreditation and self declaration of compliance with the DoD Quality Systems Manual (DoD QSM) (latest version). All laboratory requirements of DID MR 005-10 not related to the validation process continue to apply.
- Section 1.4 of DID MR-005-10 shall be modified as follows:

  Electronic Data Deliverable; G.

  All laboratory data for samples analyzed by commercial laboratories shall be submitted in the Staged Electronic Data Deliverable (SEDD) format. Details on the SEDD format are provided in SEDD Version 5.0 (or most recent version) specification located at http://www.epa.gov/superfund/programs/clp/sedd.htm. EDDs shall be provided to applicable Design Center and MM CX on a site-by-site basis IAW schedule provided in Contractor's proposal. SEDD Stage 2a is a mandatory submittal. SEDD Stage 2b should be provided if the laboratory is capable.

- Section 2.8 of DID MR-005-10 shall be modified as follows:

  2.8 ELECTRONIC DATA DELIVERABLE

  Chemical data shall also be provided electronically by the Contractor in the SEDD format and as part of the Geographic Information System. The SEDD formatted deliverable will require data parsing for use in the Automated Data Review (ADR) software (most current version). Use of the ADR software will also require that the contractor develop a comprehensive library file for all of the methods to be analyzed under this PWS. The library file will accurately reflect all of the analytical quality requirements as documented in the Final Programmatic SAP (or site-specific SAP, if deviations from the Programmatic SAP are approved) and will be provided to the appropriate Design Center, MM CX, and the sub-contract lab for use in screening EDD submittals. All electronic data submitted by the contract laboratory is required to be error-free, and in complete agreement with the hardcopy data. Data files are to be delivered both by e-mail and on high density CD accompanying the hardcopy data reports. The disk must be submitted with a transmittal letter from the laboratory that certifies that the file is in agreement with hardcopy data reports and has been found to be free of errors using the latest version of the ADR evaluation software provided to the laboratory. The contract laboratory, at their cost, will correct any errors identified by USACE. The Contractor is responsible for the successful electronic transmission of field and laboratory data under this PWS. The Contractor's laboratory is responsible for archiving the electronic raw data and sufficient associated hardcopy data (e.g., sample login sheets and sample preparation log sheets) to completely reconstruct the analyses that were performed for a period of ten years after completion of this contract.

- The following software is available upon request to support this task as government furnished software: ADR, Environmental Data Management System (EDMS), and Forms II Lite. Use of the ADR software is mandatory, use of EDMS and Forms II Lite are optional.
- Information required for completion of main SI Report need not be duplicated in SI Report Appendix containing **CHEMICAL DATA FINAL REPORT**

Perchlorate Sampling and Analysis. **Sampling and analysis for perchlorate shall be conducted IAW OSD Policy on DoD Required Actions Related to Perchlorate, DoD Perchlorate Handbook, and Interim Army Guidance on Perchlorate for Restoration/Cleanup Activities (or most recent version). Where potential for a DoD-related perchlorate source exists, the contractor shall include consideration of the need for perchlorate sampling and analysis in the project TPP. Analysis must be performed by Liquid Chromatography/Mass Spectrometry or Ion Chromatography/Mass Spectrometry. Either tandem or single mass spectrometry is acceptable. If the laboratory identified in the Contractor's initial proposal is unable to perform perchlorate analysis by one of these methods, Contractor may propose a supplemental laboratory for perchlorate analysis. If a supplemental laboratory is proposed, it must meet all PWS requirements and all documentation for new laboratory that was required for initial proposal must be provided.**

SI Reports: The Contractor shall prepare a final report using DID MR-030 as a guideline for general document format. The report content outline is attached as Appendix A. Each report shall identify the specific members and title of the Contractor's staff and subcontractors that had significant and specific input into the reports' preparation or review. The contractor shall also include a cover letter signed by an authorized person (preferably the person who signed the Task Order) of the company certifying, on behalf of the company, that the requirements of this Task Order have been met.

MRSPP Coordination: The Contractor shall coordinate stakeholder participation for the MRSPP IAW 32 CFR Part 179, specifically:

- **Notify stakeholders of the opportunity to participate in the Protocol application** ***at a meeting to be held immediately after (on the same day or the next day) the second TPP meeting. This is to be a meeting for the regulators and stakeholders only and will not include the public unless the specifically requested by the District.***
- **Publish announcements to request involvement in the application of the Protocol and information pertinent to prioritization or sequencing.** ***An ad in a local newspaper must run for 2 days, once during the week and once on Sunday.***
- **Include a copy of all notices and announcements in the project file**

- **Incorporate stakeholders' input in prioritization**
- **Include information influencing the priority in the project file**

Schedule: The Contractor shall submit a proposed programmatic project schedule in the proposal. Seven (7) days after Award the contractor shall submit and electronic copy (preferably by email) of the schedule. The schedule shall be adjusted and refined during the Technical Project Planning (TPP) process. The contractor shall update the schedule in accordance with DID MR-085, Project Status Report. A task/project specific schedule shall be submitted a minimum of 14 days after the completion of the TPP process. All schedules shall be in a format compatible with Primavera software.

Teleconferences: The Contractor shall participate in monthly MMRP teleconferences with HQ, MM CX, Technical PM, District PM, and other contractors to discuss project status and any issues that have arisen during the SI phase of work. The Contractor will be prepared to present issue resolution alternatives as part of these discussions.

In Progress Review Meetings: The Contractor shall attend Quarterly In-Progress Review (IPR) meetings on the MMRP SI with USACE representatives and other contractors at various CONUS locations. In addition, the Contractor will be expected to plan, coordinate, and host one IPR meeting each year.

Reports/Minutes, Record of Meetings. The Contractor shall prepare and submit a report/minutes of all meetings attended in accordance with DID MR-045.

Telephone Conversations/Correspondence Records. The Contractor shall keep a record of each phone conversation and written correspondence concerning this Task Order in accordance with DID MR-055. A copy of this record shall be attached to the Project Status Report.

Project Status Reports. The Contractor shall prepare and submit project status reports in accordance with DID MR-085 and include any other items required in the PWS.

Specific Tasks/Projects:

The specific Tasks/Projects below are shown in the table below. Along with the project, the responsible Geographic FUDS USACE District is shown as well as the USACE design center that will provide technical management and execute the project. The 4 (four) design centers are the Huntsville Center MM Design Center (HNC), Omaha District MM Design Center (NWO), South Pacific Division Range Support Center (SPD), Baltimore District MM Design Center (NAB).

An additional list of project sites is attached as Appendix B. This list will be used for optional future SI Projects based on funding and priority from DoD.

Task #	District	FUDS ID	FUDS Name	MM DC	Perchlorate Sampling
1.1	SAW	I04NC107101	Corolla Naval Target	HNC	YES
1.2	SAS	I04GA004503	Camp Toccoa Mil Res	HNC	YES
1.3	SAJ	I04 FL 0405	Pinecastle Jeep Range	HNC	YES
1.4	POH	H09HI024901	Kane Puu	HNC	YES
1.5	LRL	G04KY0028	Camp Breckinridge	HNC	YES
1.6	SAM	I04AL06700	Fort McClellan	HNC	YES
1.7	POA	F10AK0291	Burma Road	HNC	YES
1.8	SAC	I04SC0040	Lake Murray Bombing & Gunnery Range	HNC	NO
1.9	SAW	I04NC080303	Charlotte Naval Ammo Depot	HNC	NO
1.10	SAS	I04GA106401	Arabia Mountain State Park	HNC	NO
1.11	SAJ	I04 FL 0856	Chaffee Road Bomb Target	HNC	NO
1.12	SAC	I04SC0023	Sand Hills Bombing & Gunnery Range	HNC	YES
1.13	POH	H09HI047601	Big Island Target – Mahukona Range	HNC	NO
1.14	LRL	G04KY016506	Kentucky Ordnance Works	HNC	NO
1.15	SAW	I04NC1085	Southern Shores	HNC	YES
1.16	SAC	I04SC0042	Lk Isaqueena Bom Rng	HNC	NO
1.17	SAJ			HNC	YES
2.1	NAB	C03MD0930	Assateague Island	NAB	NO
2.2	NAE	D01ME003200	Seal Island Gunnery Range	NAB	NO
2.3	NAN	C02NJ0004	Fort Hancock	NAB	YES
2.4	NAO	C03VA000901	NAAS Creeds	NAB	YES
2.5	NAB	CO3DE0526	Fort Delaware	NAB	NO
2.6	NAE	D01MA023204	Hingham NAD	NAB	YES
2.7	NAN	C02NJ0792	Millville Bomb & Gunnery Range	NAB	YES

Task #	District	FUDS ID	FUDS Name	MM DC	Perchlorate Sampling
2.8	NAO	C03VA020201	Plum Tree Island	NAB	YES
2.9	NAB	C03PA0048	Susquehanna Ordnance Sub-Depot	NAB	NO
2.10	NAO	C03VA0162	Virginia Ordnance Works	NAB	NO
2.11	NAB	C03DE0528	Governor Bacon Health Center	NAB	NO
2.12	NAO	C03VA0103	Ft. Monroe/Ft. Wool	NAB	NO
2.13	NAO	C03VA1012	Camp Wallace	NAB	YES
2.14	NAO	C03VA0194	Chopawamic Troop Trng	NAB	YES
2.15	NAO	C03VA0027	Ft. Lee	NAB	NO
3.1	LRL	G05OH0007	Lockbourne, AFB	NWO	YES
3.2	NWK	B07MO014601	Jefferson Barracks Target Range	NWO	YES
3.3	NWO	B08WY042601	Casper Ground Gunnery Range	NWO	NO
3.4	NWS	F10OR004102	Camp Abbott	NWO	YES
3.5	LRL	E05MI003402	Camp Claybanks AAA Firing Range	NWO	YES
3.6	NWK	B07KS002904	Olathe Naval Air Station	NWO	NO
3.7	NWO	B08WY042901	Casper Precision Bombing Range No. 3	NWO	NO
3.8	NWS	F10OR002903	Camp Adair	NWO	YES
3.9	LRL	G05IN0010	Camp Atterbury	NWO	NO
3.10	LRL	G05OH002706	Erie Army Depot	NWO	YES
3.11	LRL	G05IN001904	Kingsbury Ordnance Plant	NWO	NO
3.12	LRL	E05MI001303	Ft Custer Rec Area	NWO	YES
3.13	LRL	E05MI000501	Camp Lucas/Camp Brady Target Range	NWO	NO
3.14	LRL	E05IL009903	Green River Ordnance Plant	NWO	YES
3.15	LRL	E05IL010203	Sangamon Ordnance Plant	NWO	NO
4.1	SPA	K06NM042401	Fort Sumner	SPD	YES
4.2	SWF	K06TX1008	Matagorda Peninsula Bombing Range	SPD	YES
4.3	SPL	J09CA1110	Camp Matthews	SPD	YES
4.4	SWT	K06OK011001	Great Salt Plains Bombing Range	SPD	YES
4.5	SPL	J09AZ057601	Sahuarita AFR	SPD	YES
4.6	SWF	A06LA0008	Camp Livingston	SPD	YES
4.7	SPL	J09CA707802	Camp Lockett - Target Pit	SPD	YES
4.8	SWT	K06OK001301	Camp Gruber	SPD	YES
4.9	SPA	K06NM005206	Walker AFB	SPD	YES
4.10	SWF	K06TX0058	Matagorda Island AF Range	SPD	YES
4.11	SPL	J09CA711501	Naval Air Base - Ordnance Areas	SPD	YES
4.12	SPL	J09CA724201	Camp Vista Army - Green Oak Ranch Small	SPD	NO

Task #	District	FUDS ID	FUDS Name	MM DC	Perchlorate Sampling
			Arms Range		
4.13	SWF	K06TX0144	Pyote AAF Bomb Range #1	SPD	NO
4.14	SWF	K06TX0293	Childress AAF Bombing Range #1	SPD	NO
4.15	SWF			SPD	NO
4.16					
4.17					
4.18					

Design Center-Specific Requirements:

Huntsville Design Center Projects: Southeast and Pacific IMA Regions (Tasks 1.X)

The contractor that is awarded the tasks/projects assigned to the Huntsville MM Design Center shall plan for an onboard review of draft programmatic work plan and the internal draft SI report at USAESCH in Huntsville, AL. This onboard review shall take place after the contractor has received comments on the draft WP and after receiving comments on the internal draft SI Report. The contract shall be expected to provide a CD of the draft version at the conclusion of the onboard review.

Baltimore MM Design Center Projects: Northeast IMA Region (Tasks 2.X)

The contractor that is awarded the tasks/projects assigned to the Baltimore MM Design Center shall plan for an onboard review of the draft SI report at the District office in Baltimore, MD. This onboard review shall take place after the contractor has received comments on the internal draft version.

Omaha District Design Center Projects: Northwest IMA Region (Tasks 3.X)

The contractor that is awarded the tasks/projects assigned to the Omaha District MM Design Center shall plan for an onboard review of the draft SI report at the District office in Omaha, NE. This onboard review shall take place after the contractor has received comments on the internal draft version.

South Pacific Division Range Support Center Projects: Southwest IMA Region (Tasks 4.X)

The contractor that is awarded the tasks/projects assigned to the South Pacific Division Range Support Center shall plan for an onboard review of draft programmatic work plan and the internal draft SI report at the South Pacific Division USACE Headquarters, San Francisco, Ca. This onboard review shall take place after the contractor has received comments on the draft WP and after receiving comments on the internal draft SI Report. The contract shall be expected to provide a CD of the draft version at the conclusion of the onboard review.

4.0 SUBMITTALS AND CORRESPONDENCE:

Computer Files. All final text files generated by the Contractor under this task order shall be furnished to the Contract Officer in Microsoft Word 6.0 or higher software. Spreadsheets shall be provided in Microsoft EXCEL format. All final CADD drawings shall be in Microstation 95 or higher. All GIS data shall be in ESRI (Arcview/Arcinfo) format. All chemical sampling data submittals shall be IAW DID MR 005-10 except as noted above. These documents shall be submitted on CD or DVD.

PDF Deliverables. In addition to the paper and digital copies of submittals, the final version of any and all reports and/or plans shall be submitted, uncompressed, on CD or DVD in PDF format along with a linked table of contents, linked tables, linked photographs, linked graphs and linked figures, all of which shall be suitable for viewing on the Internet. PDF files shall be produced from source documents wherever possible.

Review Comments. Various reviewers will have the opportunity to review submittals made by the Contractor under this contract. The Contractor shall review all comments received through the Technical or Project Manager/Contracting Officer and evaluate their appropriateness based upon their merit and the requirements of the PWS. The Contractor shall issue to the Project Manager a formal, annotated response to each. The Contractor shall not non-concur with a comment without discussing with the PM and/or comment maker.

Public Affairs. The Contractor shall not publicly disclose any data generated or reviewed under this contract. The Contractor shall refer all requests for information concerning site conditions to the subject FUDS Geographic USACE Corps of Engineers District with a copy furnished to the

Technical Manager. Reports and data generated under this contract are the property of DoD and distribution to any other source by the Contractor, unless authorized by the Contracting Officer, is prohibited.

Submittals: The contractor shall furnish copies of the plans, maps, and reports as identified in table below, or as specified in this PWS, to each addressee listed below in the quantities indicated.

Document Distribution: For the purposes of determining when documents get submitted to specific organizations, the attached document distribution table is provided.

Document Description	HTRW CX	MM Design Center	District PM	MM CX	HQ USACE
	Hard Copy / CD Copy	Hard Copy / CD Copy	Hard Copy / CD Copy	Hard Copy / CD Copy	CD
CSM:					
Draft	2	3	6	2	
Working Final	2	3	6	2	1
TPP Memorandum:					
Draft	1 / 2	1 / 3	1 / 6	1 / 2	1
Final Memorandum	1 / 2	1 / 3	1 / 6	1 / 2	1
SI Work Plan:					
Draft	1 / 2	1 / 3	1 / 6	1 / 2	1
Final	1 / 2	1 / 3	1 / 6	1 / 2	1
SI Report:					
Draft	1 / 2	1 / 3	1 / 6	1 / 2	
Draft Final	1 / 2	1 / 3	1 / 6	1 / 2	1
Final	1 / 2	1 / 3	1 / 6	1 / 2	1

Notes:

1. The number of final copies distributed may vary from that shown above

Period of Performance: *All projects are to be completed within 18 months of the award date.*

Milestones:

TPP Memorandum (accepted)

Work Plan (accepted)

Field Work Completed

Final SI Report (accepted)

Milestones will be considered met or completed when the appropriate QC documentation has been submitted and QA completed and the submittal and/or product is accepted.

Points of Contact:

Program Manager:

Betina Johnson

CEHNC-OE-CX

US Army Engineering and Support Center

P. O. Box 1600

4820 University Square

Huntsville, AL 35807

256-895-1238

Betina.V.Johnson@hnd01.usace.army.mil

Huntsville Center MMRP SI Regional Program Manager

Chris Cochrane

CEHNC-OE-DC

US Army Engineering and Support Center

P. O. Box 1600

4820 University Square

Huntsville, AL 35807

256-895-1696

Chris.Cochrane@hnd01.usace.army.mil

Omaha District MMRP SI Regional Program Manager

Robert Zaruba

CENWO-PM-HB (ZARUBA)

106 South 15th Street

Omaha, NE 68102-1618

(402) 221-7659

Robert.K.Zaruba@nwo02.usace.army.mil

SPD Range Support Center MMRP SI Regional Program Manager

Monique Ostermann

CESPA-EC-EG (Ostermann)

4101 Jeff Plaza NE

Albuquerque, NM 87109

(505) 342-3475 Monique.M.Ostermann@spa02.usace.army.mil

Baltimore District MMRP SI Regional Program Manager

Leland Reeser

CENAB-EN-HN (Reeser)

10 South Howard Street

Room 10040D

Baltimore, MD 21201

(410) 962-2186

Leland.H.Reeser@nab02.usace.army.mil

5.0 REFERENCES

5.1 Basic Contract

5.2 USACE, 2004 - HTRW Chemical Data Quality Management (CDQM) Policy for Environmental Laboratory Testing, September 30, 2004

5.3 DoD Quality Systems Manual (DoD QSM) (latest version).

5.4 USEPA, 1992 - Guidance for Performing Site Inspections under CERCLA; Interim Final, September 1992, PB92-963375, EPA 9345.1-05

5.5 EM 200-1-3, Requirements for the Preparation of Sampling and Analysis Plans

5.6 ER 1110-1-263, Chemical Data Quality Management for Hazardous, Toxic, Radioactive Waste Remedial Activities

5.7 DOD Memorandum on Definitions Related to Munitions Response Actions, 18 December 2003, http://www.epa.gov/fedfac/pdf/MRP_Definitions_12-18-03.pdf.

5.8 Military Munitions Center of Expertise Technical Update Munitions Constituent (MC) Sampling March 2005.

5.9 OASA(I&E) Memorandum on Munitions Response Terminology, April 21, 2005

5.10 DUSD (I&E) Policy on DoD Required Actions Related to Perchlorate, January 26, 2006

5.11 EPA OSWER Assessment Guidance for Perchlorate, January 26, 2006

5.12 DoD Perchlorate Handbook, March 2006

5.13 ACSIM Memorandum: Interim Army Guidance on Perchlorate for Restoration/Cleanup Activities, May 25, 2006

SAMPLE PUBLIC COMMENT NEWSPAPER AD

PUBLIC NOTICE

Name of site

Taking into consideration various factors relating to safety and environmental hazard potential, the U.S. Army Corps of Engineers designated ***name of site*** as a Munitions Response Site for applying the Department of Defense's Munitions Response Site Prioritization Protocol.

DoD conducted live-fire training and testing of weapon systems at active and former military installations throughout the United States to ensure force readiness and defend our nation. While DoD has made great progress in addressing the potential hazards associated with former munitions-related activities, much remains to be done. Through direction provided by Congress, DoD developed a model that assigns priorities to defense sites containing unexploded ordnance, discarded military munitions or munitions constituents.

One sentence that describes what took place at this site (i.e. chemical warfare training, live-fire, testing, etc.). The U.S. Army Corps of Engineers has recently completed a site inspection at ***name of site*** and evaluated it using the prioritization model. The evaluation criteria, including types of munitions that may be present, ease of access to the site and number of people living near the site, are available for public review at ***district Web site*** and ***name of information repository.***

If you have additional information about ***name of site*** please send it to: U.S. Army Corps of Engineers, ***name of district***, Public Affairs Office, ***address*** or email to ***email address for PAO***.

For more information, please contact the U.S. Army Corps of Engineers, ***name of district***. Public Affairs Office at ***phone number***.

SECTION G - CONTRACT ADMINISTRATION DATA

Accounting and Appropriation

Summary for the Payment Office

As a result of this modification, the total funded amount for this document was increased by $1,212,109.00 from $7,051,591.53 to $8,263,700.53.

CLIN 0008:

CS: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 9L4D96 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CS has been added.

CT: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 L4JD47 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CT has been added.

CU: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 92D9K0 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CU has been added.

CV: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 607BG5 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CV has been added.

CW: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 1FB51L was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CW has been added.

CX: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 9F300K was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CX has been added.

CY: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 72K0L4 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CY has been added.

CZ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 3D7KBB was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN CZ has been added.

DA: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 LDF20K was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DA has been added.

DB: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 4LHFFJ was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DB has been added.

DC: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 H8H6D7 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DC has been added.

DD: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 9GG8K9 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DD has been added.

DE: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 GLHL60 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DE has been added.

DF: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 0DB05F was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DF has been added.

DG: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 41DBDG was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DG has been added.

DH: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 7H12CD was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DH has been added.

DJ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 D93881 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DJ has been added.

DK: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 C2B331 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DK has been added.

DL: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 B1J839 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DL has been added.

DM: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 D5DD53 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DM has been added.

DN: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 H1203K was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DN has been added.

DP: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 KF76K9 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DP has been added.

DQ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 06BG23 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DQ has been added.

DR: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 C87G9L was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DR has been added.

DS: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 2139H4 was increased by $6,721.00 from $0.00 to $6,721.00

The contract ACRN DS has been added.

DT: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 J683GK was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DT has been added.

DU: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 6F055C was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DU has been added.

DV: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 8J2D8L was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DV has been added.

DW: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 46H2FL was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DW has been added.

DX: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 K1L26J was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DX has been added.

DY: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 12F88B was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DY has been added.

DZ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 32GJ3K was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN DZ has been added.

EA: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 J58C47 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EA has been added.

EB: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 31GLD6 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EB has been added.

EC: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 C64120 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EC has been added.

ED: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 8H80KH was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN ED has been added.

EE: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 7H33HK was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EE has been added.

EF: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 K73G68 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EF has been added.

EG: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 KB03L2 was increased by $6,721.00

from $0.00 to $6,721.00
The contract ACRN EG has been added.

EH: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 F7H91G was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EH has been added.

EJ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 G831CJ was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EJ has been added.

EK: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 9K5G1L was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EK has been added.

EL: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 3L2J39 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EL has been added.

EM: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 3B9K34 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EM has been added.

EN: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 GK27D1 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EN has been added.

EP: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 D51KF1 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EP has been added.

EQ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 03CF6G was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EQ has been added.

ER: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 9B1LK9 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN ER has been added.

ES: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 452B6D was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN ES has been added.

ET: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 75H962 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN ET has been added.

EU: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 JD0KD0 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EU has been added.

EV: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 18114K was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EV has been added.

EW: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 D9K38L was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EW has been added.

EX: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 081K5K was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EX has been added.

EY: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 J88B1F was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EY has been added.

EZ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 D4GJL5 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN EZ has been added.

FA: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 L7K3K4 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN FA has been added.

FB: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 9D6B16 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN FB has been added.

FC: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 6B1L69 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN FC has been added.

FD: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 325GD3 was increased by $6,721.00 from $0.00 to $6,721.00
The contract ACRN FD has been added.

FE: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 1K8FLG was increased by $163,350.00 from $0.00 to $163,350.00
The contract ACRN FE has been added.

FF: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 14B53C was increased by $150,346.50 from $0.00 to $150,346.50
The contract ACRN FF has been added.

FG: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 75C2KJ was increased by $150,346.50 from $0.00 to $150,346.50
The contract ACRN FG has been added.

FH: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 F015FC was increased by $154,035.00 from $0.00 to $154,035.00
The contract ACRN FH has been added.

FJ: 21 NA 2006 2020.0000 A0 2006 08 8130 49300821000 01110 3230 D52172 was increased by $190,771.00 from $0.00 to $190,771.00
The contract ACRN FJ has been added.

(End of Summary of Changes)

Appendix A
Site Inspection Report Outline
21 November 2006

TABLE OF ACRONYMS

GLOSSARY OF TERMS

Table of Contents (Government will provide example table of contents but allows for flexibility in the TOC)

EXECUTIVE SUMMARY

- Brief 1-2 page summary
- Include a table summarizing findings by MRA/MRS.
- Include small paragraph summarizing recommendations.

1.0 INTRODUCTION

- State that an SI was performed, the name of the agency performing it, and the authority under which it was conducted (authority language provided below):

  The Department of Defense (DoD) has established the Military Munitions Response Program (MMRP) to address DoD sites suspected of containing munitions and explosives of concern (MEC) or munitions constituents (MC). Under the MMRP, the U.S. Army Corps of Engineers (USACE) is conducting environmental response activities at formerly used defense sites (FUDS) for the Army, DoD's Executive Agent for the FUDS program.

  Pursuant to USACE's Engineer Regulation (ER) 200-3-1 (USACE, 10 May 2004) and the Management Guidance for the Defense Environmental Response Program (DERP) (Office of the Deputy Under Secretary of Defense (Installations and Environment), September 2001), USACE is conducting FUDS response activities in accordance with the DERP statute (10 USC 2701 et seq.), the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 USC §9601 et seq.), Executive Orders 12580 and 13016, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR Part 300). As such, USACE is conducting remedial site inspections (SI), as set forth in the NCP, to evaluate hazardous substance releases or threatened releases from eligible FUDS.

  While not all MEC/MC constitute CERCLA hazardous substances, pollutants or contaminants, the DERP statute provides DOD the authority to respond to releases of MEC/MC, and DOD policy states that such responses shall be conducted in accordance with CERCLA and the NCP.

- State the FUDS property name, FUDS property and project numbers, and location (street address, city, county, State, latitude/longitude coordinates). If necessary, provide brief directions to the property.
- State the purpose, scope, and objectives of the SI (standard language provided below):

  The primary objective of the MMRP SI is to determine whether a FUDS project warrants further response action under CERCLA or not. The SI collects the minimum amount of information necessary to make this determination, as well as it (i) determines the potential need for a removal action (ii) collects or develops additional data, as appropriate, for Hazard Ranking System (HRS) scoring by Environmental Protection Agency (EPA); and (iii) collects data, as appropriate, to characterize the release for effective and rapid initiation of the Remedial Investigation and Feasibility Study (RI/FS). An additional objective of the MMRP SI is to collect the additional data necessary to ~~(i)~~ complete the Munitions Response Site Prioritization Protocol (MRSPP).

Appendix A
Site Inspection Report Outline
21 November 2006

2.0 PROPERTY DESCRIPTION AND HISTORY

- Identify and describe historic military operations (e.g., munitions manufacturing plant, Air Force or Navy base, Army WWII training camp, etc.) at the FUDS property, as well as the individual MRAs (e.g., mortar range, artillery range, open burning/open detonation area, burial pit, etc.)/MRSs identified.
    - Identify former owners and operators, years of operation, types of MEC and MC used and thought to be present, any MEC or MC treatment or disposal practices, containment features, if present, and quantities of MEC or MC used and thought to be present, if known or possible to estimate. Identify current owners and operators and current land use.
    - Describe the area's physical setting (e.g., topography, climate, vegetation, and significant structures). Describe accessibility to MEC and MC and current institutional controls (e.g., fencing, signage, etc.). Briefly describe surrounding land uses and identify nearby populations.
- Include the appropriate portion of a USGS 7.5-minute topographic map locating the project and surrounding area. On the map, identify nearby surface water bodies and the nearest groundwater and drinking water wells, drinking water intake, residence, wetlands, and other sensitive environments, as applicable.
- If applicable, provide the dates, scopes, and general results of previous investigations for MEC and MC, including previous records reviews (Archives Search Reports (ASR) and results of subsequent range inventory (ASR supplement)) and any investigations conducted under USACE's hazardous, toxic, and radioactive waste (HTRW) program related to MC.
- If applicable, describe other land use that may have contributed to contamination, as well as regulatory history, if applicable, including RCRA status, permits, permit violations, and inspections by local, State, or Federal authorities.
- Discuss any occurrences of MEC found by citizens and any accidents, injuries, chemical exposures, or complaints.

3.0 SI TASKS

- Include a summary of agreements made in the first Technical Project Planning (TPP) session and contacts made with the State Historical Preservation Office, U.S. Fish and Wildlife Service, or other agencies coordinated with on cultural and natural resources considerations.
- Describe the results of any additional desk-top research or interviews conducted as part of the SI, by MRA, as applicable.

4.0 MEC Findings

- Summarize, by MRA, the investigative activities conducted for MEC and the results. Present data quality objectives (DQOs) of the SI and discuss whether they were satisfied.
    - Identify specific MEC items found, wherever possible, and list them in a table, describing the results of the qualitative reconnaissance, as well as any geophysical studies, spatial analysis, aerial surveys, and footprint analysis (i.e., identification of MRA boundaries), if conducted. Include a map of the results of the reconnaissance inspections.
    - Summarize previous MEC findings in a table. Include a map of MEC finds, and add locations to the CSM, or refer to a map in a previous report.

5.0 MIGRATION/EXPOSURE PATHWAYS AND TARGETS

Appendix A
Site Inspection Report Outline
21 November 2006

GROUND WATER MIGRATION PATHWAY

- Describe the local geologic and hydrogeologic setting and features, (including the stratigraphy, geologic formations, aquifers, karst features, confining layers, and depth to each aquifer. Provide a description of the underlying unit with the lowest hydraulic conductivity, including its thickness. (Do not consider units within the first 10 feet below ground surface.)
- Discuss ground water use within a 4-mile radius of the MRAs. Identify the nearest private and municipal drinking water wells, including standby wells used at least once a year. Provide the number of wells, their locations, pumping rates, and the aquifer from which water is drawn. Identify wells in karst aquifers. Quantify drinking water populations served by wells within 4 miles, breaking out populations into the following distance categories: 0-1/4; >1/4-1/2; >1/2-1; >1-2; >2-3; and >3-4 miles, including residents, students, and workers. Identify any municipal wells that are part of a blended system (ground water mixed with surface water), and provide the relative amount the wells contribute to the system. [Note: Where more than one MRSs have been identified, measure the distance to ground water targets from them, as opposed to the MRA.]
- Indicate whether ground water within a 4-mile radius of the MRAs is used for any of the following purposes: irrigation (5-acre minimum) of commercial food or forage crops; watering of commercial livestock; ingredient in commercial food preparation; supply for commercial aquaculture; or supply for a major or designated water recreation area. If there are no drinking water wells, indicate whether aquifers are usable for drinking water purposes.
- Identify designated Wellhead Protection Areas (pursuant to Section 1428 of the Safe Drinking Water Act) and specify location.
- Note: Some of the information listed above may already have been collected during the preliminary assessment (PA), and if so, may be summarized from the PA. If not, the contractor may choose to utilize companies that specialize in providing or compiling environmental data to parties involved in real estate transactions.
- Discuss any previous ground water sampling results (analyzed for MC); provide dates of sampling events, well locations, and the depths and names of sampled aquifers. Summarize analytical results in a table and include sampling locations in the CSM in Appendix J or refer to a map in a previous report.
- List in a table each well or spring sampled during the SI, provide the depth from which it draws drinking water and the screened interval, quantify the population served by the well, if applicable, and identify its distance from the MRAs. Discuss SI ground water sampling results in terms of attribution of hazardous substances to DoD activities and comparison to background concentrations, as applicable. List in a table each sample and summarize analytical results. Include a map of sampling locations ~~or~~ Identify drinking water wells exposed to hazardous substances, if present, and quantify the populations served by those wells, as applicable. If no groundwater samples were taken, explain. For example, sampling may not be supported by the CSM (no complete exposure route exists or no receptors are present), or it was decided in the TPP session that soil/sediment/surface water, etc. would be the focus of the SI because the project was already identified as requiring an RI/FS, and groundwater contamination could more effectively be addressed at that phase.

SURFACE WATER MIGRATION PATHWAY

- Describe the local hydrologic setting, including MRA location with respect to the nearest surface water bodies and potentially affected floodplains. Include a figure depicting surface water features and targets (fisheries, wetlands, etc.) Describe the overland and in-water segments of the surface water migration path, starting at the perimeter of the MRA and ending 15 miles downstream of the probable point of entry (PPE) of MEC/MC into surface water. Identify all water bodies within the

in-water segment, and state the length of reach and flow or depth characteristics of each. Describe any tidal influence along the surface water migration path. Note: surface water includes perennially flowing man-made ditches as well as intermittently flowing ditches in areas with <20 inches of mean annual precipitation. For lakes, oceans, coastal tidal waters, and the Great Lakes, apply the 15-mile target distance limit as an arc. [Note: Where more than one MRSs have been identified, measure the distance to all surface water targets from them, not the MRAs.]

- Add the surface water migration path to the CSM in Appendix J. Describe upgradient drainage areas (including predominant soil type), onsite drainage (including storm drains, ditches, culverts, etc.), discharges into surface water, and pertinent historical events, including floods, fish kills, and fishery closures.
- Indicate whether surface water within the 15-mile target distance limit supplies drinking water. Identify the location and state the distance from the PPE to each drinking water intake. Quantify the population served by the intake; identify blended systems (where surface water is mixed with ground water) and provide the relative amount that surface water contributes.
- Indicate whether surface water within the target distance limit contains recreational, subsistence, or commercial fisheries. Identify and state the distance from the PPE to each fishery; briefly characterize each.
- Identify sensitive environments present within or adjacent to the in-water segment. Include all sensitive environments listed in Attachment 2 of the USACE guidance entitled "Screening Level Ecological Risk Assessments for MMRP SIs" (Army checklist for important ecological places). State the distance from the PPE to each sensitive environment. In addition, quantify the length of wetlands frontage along the surface water migration path within the following mileage categories downstream of the PPE: <0.1, 0.1-1, >1-2, >2-3, >3-4, >4-8, >8-12, >12-16, >16-20, >20 miles.
- Note: Some of the information listed above may already have been collected during the PA, and if so, may be summarized from the PA. If not, the contractor may choose to utilize companies that specialize in providing or compiling environmental data to parties involved in real estate transactions.
- Discuss any previous surface water and/or sediment sampling results (analyzed for MC), including dates, locations, and types of samples. Summarize analytical results in a table and include sampling locations in the CSM in Appendix J or refer to a map in a previous report.
- Discuss SI surface water and sediment sampling results. List in a table each sample and summarize analytical results. Identify surface water intakes, fisheries, and sensitive environments exposed to hazardous substances, if present at concentrations significantly above background; quantify the affected drinking water populations and fisheries (in pounds per year) and describe the exposed sensitive environments, including wetlands frontage, as applicable. If no surface water or sediment samples were collected, explain. For example, sampling may not be supported by the CSM (no complete exposure route exists or no receptors are present). Alternatively, surface water may not have been present to allow collection of a sample..

SOIL EXPOSURE PATHWAY

- Discuss any previous observations and sampling results of surface MEC or MC, including dates and locations. Summarize analytical results in a table and include sampling locations in the CSM in Appendix J or refer to a map in a previous report.
- Discuss SI surface soil samples. List each sample in a table and summarize analytical results. If soil samples were not collected, explain. For example, sampling may not be supported by the CSM (e.g., no surface soil sampling was planned for the FUDS because range activities were limited to the use of practice bombs with spotting charges. If field reconnaissance identified MEC debris associated with MEC other than practice bombs, the need for MC sampling was reassessed in the field).

Appendix A
Site Inspection Report Outline
21 November 2006

- State the number of workers, residents, and students present on and within 200 feet of areas of observed surface contamination (hazardous substances within top 2 feet of surface soil) and identify the locations of the pertinent workplaces, schools, day care facilities, and homes. If there are no workers, residents, or students on or within 200 feet of observed contamination, state the shortest travel distance within 1 mile to any residence or school (accounting for natural barriers to travel on foot).
- State the number of people who live or attend school within 1 mile travel distance of areas of observed contamination, within the following distance categories: >0-1/4, >1/4-1/2, >1/2-1 mile. (Do not include those counted on or within 200 feet of area of observed contamination, as above.)
- Indicate whether any of the following terrestrial sensitive environments exist in the area of observed contamination:
  - Terrestrial critical habitat for Federal designated endangered or threatened species; National Park; designated Federal Wilderness Area; National Monument
  - Terrestrial habitat known to be used by Federal designated or proposed endangered or threatened species; National Preserve (terrestrial); National or State Terrestrial Wildlife Refuge; Federal land designated for protection of natural ecosystems; administratively proposed Federal Wilderness Area; terrestrial areas utilized for breeding by large or dense aggregations of animals
  - Terrestrial habitat known to be used by State designated endangered or threatened species; terrestrial habitat known to be used by species under review as to its Federal status
  - State land designated for wildlife or game mgmt; State designated Natural Areas; particular areas, relatively small in size important to maintenance of unique biotic communities
- Describe how attractive/accessible the area of observed contamination is for public use, indicating whether the area is: designated for recreational use; area is regularly used for public recreation; accessible and uniquely used for recreation (e.g., vacant lots in urban areas); moderately accessible (e.g., some access improvements, such as gravel road) with some public recreation use; slightly accessible (e.g., rural area with no road improvement) with some public recreation use; accessible, with no public recreation use; physically inaccessible to the public, with no evidence of public recreation use.

AIR MIGRATION PATHWAY

- Identify for each MRA the potential for release of contaminated particulate to the air and conditions that may prevent release (area is covered by liquids, uncontaminated soil cover, or thick vegetation, or area is surrounded by windbreak, or source is totally enclosed in intact building or containers.) Describe the results of any air samples, if collected. If air samples were not collected, explain. For example, no air samples were collected because there are no known sources of air contamination associated with the historic DoD operations; Surface soil may present a source of particulate contamination; therefore surface soil samples were collected during the SI, as applicable). Discuss any previous observations of air releases or air sampling results, including dates, locations, sampling procedures, and meteorological conditions.
- Identify the location of and distance to the nearest resident, worker, or student within 1 mile of the source of particulate contamination.
- State the population within 4 miles of the sources of particulate contamination, including residents, students, and workers, broken out into the following distance categories: on a source; >0-1/4, >1/4-1/2, >1/2-1, >1-2, >2-3, >3-4 miles.
- Indicate all types of sensitive environments, using those listed in Attachment 2 of the USACE guidance entitled "Screening Level Ecological Risk Assessments for MMRP SIs" (Army checklist for important ecological places), within 4 miles of the source of particulate contamination, broken out into the same distance categories listed above for human populations.

Appendix A
Site Inspection Report Outline
21 November 2006

- Indicate the total acres of wetlands within 4 miles of the source of particulate contamination, broken out into the same distance categories listed above for human populations

- For results of the MC investigation, summarize the number and type of samples collected in each MRA, including background samples, and identify specific hazardous substances, if detected. Describe observations made at each sampling location (presence of MEC, MEC scrap, MC bulk material, targets, craters, proximity of known or suspected MEC items, stressed vegetation, and nature of sample material if unusual characteristics are noted (e.g., high turbidity, discoloration, high organic matter content). List in a table each environmental sample collected and summarize analytical results. Include a map of sampling locations.

6.0 SCREENING-LEVEL RISK ASSESSMENT

- Provide discussion of risk from MEC. (i.e. likelihood of removing MEC from its original location, accessibility, detonation on contact, etc.). State whether or not it is believed that MEC may be present and why. Summarize the attributes of the potential MEC (type, how it functions, and potential hazard) Describe the potential receptors and how they may interact with the MEC. {Describe the potential hazards from potential MEC. Presence of MEC and any potential human receptors is normally sufficient to justify an RI/FS. More detailed explanation of hazards will be required to justify NDAI (if there is a potential MEC presence), TCRA, or NTCRA.}
- Provide sub-sections entitled "Screening Level Human Health Risk Assessment (HHRA)" and "Screening-Level Ecological Risk Assessment (ERA)." Discuss the conservative evaluation of the potential for adverse effects to human health and the environment due to MC contamination. This information is used to make recommendations for areas that do not pose a significant threat from MC, those that require further investigation, and those that may require a removal action. The HHRA will compare exposure point concentrations (highest detection or 95% upper confidence limit (UCL) if sufficient data exists) to health-based screening levels and will be consistent with USACE's Risk Assessment Handbook Vol. I: Human Health Evaluation (EM 200-1-4). The ERA shall be consistent with Steps 1 and 2 of the U.S. EPA guidance, Ecological Risk Assessment Guidance for Superfund (ERAGS): Process for Designing and Conducting Ecological Risk Assessments.
- All complete pathways shown in the CSM (Appendix J) shall be addressed in this section.
    - Human
    - Ecological
    - MEC

7.0 SUMMARY AND CONCLUSIONS

- Briefly summarize the major aspects of the FUDS property, the MRAs (and the MRSs), and their histories that relate to the release or threatened release of MEC or MC and the exposure of human and ecological target populations. Briefly summarize principal migration pathways and targets of concern. [Note: Where MRSs have been identified, provide a summary for each.]
- Summarize sampling results, including MEC and MC found and detected in the MRAs as well as within the migration pathways.

8.0 RECOMMENDATIONS

- Summarize recommendations for further remedial response (RI/FS), removal response, or No Department of Defense (DoD) Action Indicated. Provide recommendations and the basis for these recommendations (from MEC and MC results) in tabular format

Appendix A
Site Inspection Report Outline
21 November 2006

9.0 REFERENCES

- List, in bibliographic citation format, all references cited in the SI report.

APPENDICES

A. Performance Work Statement – Electronic Only
B. Technical Project Planning (TPP) Session Documentation/Meeting Minutes – Electronic Only
C. Interview Documentation (pertinent teleconferences regarding site history or conditions; coordination on cultural and natural resources considerations)
D. Field Notes and Field Forms
E. Photodocumentation Log (As an attachment, provide photographs taken during the SI depicting pertinent observations such as MEC and MC source areas, containment conditions, stained soil, stressed vegetation, drainage routes, sample locations, and any MEC or munitions debris findings. Describe each photograph in captions or accompanying text. Key each photo to its location on the site sketch or CSM)
F. Analytical Data – Electronic Only, should include SEDD files and laboratory reports in pdf. – for all versions (Draft, Draft-Final, and Final) of the report
G. Analytical Data QA/QC Report, to include all requirements from DID MR005-10 for Chemical Data Final Report that are not addressed elsewhere and the USACE-prepared Chemical Quality Assurance Report (CQAR)
H. Geographic Information Systems Data – Electronic Only
I. Geophysical Data, if applicable. (All raw and processed geophysical data and geophysical maps in their native format (Surfer, Geosoft Oasis montaj, Intergraph, or ESRI ArcView format) and/or as raster bit-map images such as BMP, JPEG, TIF, or GIF.) – Electronic Only; Maps hardcopy also.
J. Conceptual Site Model
K. Munitions Response Site Prioritization Protocol Evaluations (for each MRS)
    - The protocol is being applied at the MRS level, because individual MRSs are to be delineated. For purposes of applying the Protocol herein, usually the MRS equals one MRA. [Note: Where MRSs have been identified and there is more than one MRS in the MRA apply the Protocol to individual MRSs, ensuring the total acreage adds up to the MRA acreage.]
    - Directions section of the MRSPP sheets shall contain specific references and critical information used to develop the score for that particular table in the MRSPP.
    - Do not use bolding to show selection. Use boxes or circles to show selection.
    - Recommend printing the Table 20 rather than all the CWM tables for the printed copy. The other CWM tables provide no information if there's no known or suspected hazard.
    - Include site name, FUDS Project ID, MRS identifier, and Appendix Pg # to each page. If the site is in the Range Inventory (i.e., has a number in the ASR Supplement), the Range Inventory designation/name should be included. Similarly, if there is an ARC number (see http://deparc.egovservices.net/deparc/do/home), it should be included.
    - Need to provide guidance on what to do if no media sampled (no hazard or just leave blank)
    - Table 9 (cultural and eco) shouldn't just refer to the ASR, but also the SI report, which presumably acquired more current and complete information than the ASR.
    - Per the current draft (and all preceding drafts) of the Primer, "All contaminants of concern attributable to an MRS should be included. Naturally occurring compounds that are detected within established background concentration ranges are not included." Given that the contractor collected background (or "ambient") samples, it is unreasonable to include every detected metal in these worksheets.
L. Reference Copies: Attach copies of communication records and other references gathered for additional HRS and MRSPP data (e.g., records of teleconferences with local water or county health departments on groundwater use; references for locating sensitive environments and population densities). Any site specific documents/reports used to formulate your recommendation (include other pertinent reference materials generated during the SI that are not otherwise cited or included in the

Appendix A
Site Inspection Report Outline
21 November 2006

Appendices. (e.g. Copies of previously issued reports, ASRs, other investigation reports (i.e. ATSDR, CDC, DHHS), etc) in electronic copy only. Include hard copies only of things produced as part of the SI effort (contact records, etc.) and critical excerpts from reference documents.